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TWIN CITIES ATARI INTEREST GROUP

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Bla..Bla..Bla..
Dave Stengel

Well, here we go with another ever exciting newsletter. I am very pleased with all the letters I have been getting. I asked for articles and you gave it to me....you really socked it to me. I have currently received two type-in programs from a couple of our ever-faithful members. One is a rather short banner making program that produces quite an attractive banner. It is not at all as good as the Print Shop, but it's in Basic, it's short, and it's good. The other program I received is a Party Quiz modification program that allows you to develop your own questions, as well as answers, and save them on disk (I think).

It looks like Ben Porter went totally out of his way to make this program, because it is quite a long program. I've been so logged down with mail and other programs that I have not even had time to check the BBS for articles. I would also like to make it clear that I did not invent last month's crossword puzzle. It came on the Crossword Magic master disk.

Cory here so....

Well, I am not as pleased with you, because I have NOT gotten any mail over the past month, well I've gotten mail, but none from any TAIG members. Well, both Dave and I have gotten our 1030 modems, those who frequent the BBS are already upset about this, but that is irrelevant. So, what does this mean? Well, we can BOTH download articles, either from the BBS or personally. We do, still accept articles through the mail. If you are mailing an article to either of us, we would prefer it to be in condensed mode, with a 36 character line. This will prevent us from retyping your masterpiece, thus probably botching it. But, we are editors and do type (ha) so, it is not necessary to follow all the printer crap.

So, send us (me) an article this month, of this year. Please...

Now for a refresher course in addresses....

Dave Stengel, 3230 Shadyview Lane
Plymouth, MN 55447 (ph)475-1472

Cory Johnson, 1835 Shadyview Circle
Plymouth, MN 55447 (ph)473-4190

Short, Sweet, 1030 Review
by Cory Johnson

Well, as you know I got it.... the 1030 modem, plus a very thick phone bill. The price of progress. I've become addicted to telecommunications, and long-distance calling to such places as The Valley Girl, (CA) and Zandor (AZ (that was a hour long talk with the sysop)). AT&T is in love with me. But, this isn't a review so, on with it.

The modem comes with 3 public-domain programs (Disk link, Tscope, and Amodem 4.2, the one I am having my current problems with) that are provided by Antic. It comes with a 300 baud output, a pain when trying to up/download, but many BBS's won't have 1200 baud capability for years and 300 is more than fast enough to carry on an on-line conversation.

Oh, the modem also has a built in program (Modemlink) which allows pulse and tone dialing, but doesn't support up/downloads, although you can trick it to do this (see Antic, March 1985, page 35. In theory, it should work, but I have not had the opportunity to try it). All in all not a bad deal for \$89.00 (not the Antic, the modem).

So, what have I said.... not a thing of significance, but I think that the 1030 is a very good modem, and the software provided is functional, and other software (HomePak and some other Amodem variations to name a very few, Kermit and Chamelion to name two more...) are available. That's it, not very short.

Party Quiz Utility
by Ben Porter

The Party Quiz Game by Suncom has become a real favorite of trivia buffs. What it lacks is the ability to compose your questions and answers. This utility program was born out of that frustration. The uses for this program are endless. Educational uses could include math-like flash cards. I'm using the utility as a primer for a party-testing the groups knowledge of each other. The next family reunion I'm intending on checking into the trivia of our family history.

The data question disks are not copy protected. Examining the disk I found that sectors 10 through 720 are available for multiple and true/false questions. Each sector holds exactly two questions of 64 bytes each. A total of 1420 questions exist per disk. Sectors 5 through 8 hold comments about your gaming ability. Each is 16 bytes for a total of 32 comments.

Sector 3 holds the name of the edition, a two byte pointer to the first multiple choice sector, a two byte total of the current number of multiple choice questions, a pointer to the first true/false sector and a two byte total of the current number of t/f questions. The last 112 bytes of the sector are not used.

The party quiz game randomly selects questions from the disk. The right answer is randomly placed among the false answers. If you don't have enough questions to finish a game there may be some repeating questions, so it is best to write at least 100 to 200 questions for your new disk. Also it appears that questions in the same sector do not appear in the same game, so if you have similar questions you should try to put them in the same sector.

The utility program includes a nice restricted input routine which could be abstracted to use in your own programs. This input routine includes a flashing cursor, alphanumeric entry or range protected numeric entry and selected length limits which are visible to the user.

The utility program calls three short machine language programs (USR functions) from basic. They are stored in the strings SIO\$, LOOK\$ and WRITES\$. The most important of these

is SIO\$ which stands for serial input/output. Exactly one sector(128 bytes) is stored or sent to the disk. The parameters of the USR ask for an address where the code is stored, whether to read or write to the disk(82=READ 87=WRITE), the address of the starting point of the 128 bytes to transfer and the disk sector to use.

A=USR(ADDRESS,WRITE/READ,ADDRESS,SECTOR)

The LOOK\$ and WRITE\$ USR's interpret a two byte segment of a string(INDEX\$) changing it into or from a number for use in the program.

Currently the utility program will allow you start a new question data disk or update a previous disk if room for additional questions exists. Of course, you don't have to understand the program to use it. So type it in making special note that the symbols in lines 788,662,668 will need to be replaced with their correct symbols in lines 170 and 175.

Important variables are as follows:

MULTIPLE=max. nu. of mult. choice questions.
 TRUFALSE=max. nu. of TF questions.
 M =current nu. of mult. ?'s.
 TF =current nu. of TF ?'s.
 BUFFER\$ =storage string to send or get 128 bytes from disk.
 MSK\$ =mask for input routine.
 INDEX\$ =sector three info.
 TSECTORS=first sector for TF ?'s.
 IL =max length for input
 IC =starting column for input.
 IR =starting row for input.
 LO/HI =range limits for input.
 J =current length of input.
 BUFOFF =buffer offset into BUFFER\$
 0=1st ? 64=2nd ?
 TLEN =current length of question and answers.
 SLEN =starting length max limit/?

Ed: The listing for this program is much too long for us to fit it in the newsletter, so instead you can find on the disk of the month, next month hopefully.

Male to the Editor

Well, we recived many letters this month, which is good. So, I'm devoting a column to these letters. Maybe you can answer a few of thier questions better than I can. Hopefully I will receive enough letters to make this a permanant column in the newsletter. Enough small talk, on with this month's mail.

Sorry to read your last article...I really feel sorry for you so I am enclosing a short program that you and some of the other TAIG members might find interesting. Now at least you've gotten one letter.

Also inclosed is a copy of a newsletter that I received from another Atari group. There are many such groups around the country and I would think that if we would put them on our mailing list they would do the same for us and we would get alot of good information from various groups that share common interests. If you or someone would give permission to add these groups to our mailing list I would be glad to pursue contacting them about a reciprocal arrangement.

P.S. I have only made it through Zork I and II so far. Number III is up now and tough!! How long does it normally take you to finish one of these?

Gary Robinson

Ed: No need to feel sorry for us, but thanks for the letter and the program. As for the exchanging of newsletters, I think it is just marvelous. If you would like to do some newsletter swaping, it's fine with me if it's okay with Phil.

As for the adventures, I'm no genius. It takes me as long as it takes anybody to get through an Infocom, or any other adventure. You are right about Zork III. The most difficult part, to me, is the Royal Puzzle. I do, of course, have the answers to that game, but that does take the fun out of it.

Well, I had another letter on

how to make an oscilloscope, but I could not read some of the writing on the diagram. This means it will have to wait until next month to be published. Sorry. So, give me or Cory a call and clarify it.

Banger
 by Gary Robinson

This is the program described in the letters section of the newsletter.

```
10 REM BANNER PROGRAM
20 OPEN #1,4,0,"P:":DIM
A$(100),S$(20),Z$(20),C$(20),B(7),S(7),H(7)
30 CS=PEEK(756):Z$=256:FOR I=0 TO
7:B(I)=INT(Z/I+0.5):S(I)=0:NEXT I
40 PRINT "HEIGHT (80)":INPUT H:PRINT
"LENGTH (24)":INPUT L:H=L/8:L=L/8
50 PRINT "CHARACTER ($)":INPUT
S$:S$(20)=S$:S$(2)=S$
60
7$ (1)=CHR$(32):Z$(20)=CHR$(32):Z$(2)=
Z$
70 Z$=Z$(1,H):S$=S$(1,H):PRINT "ENTER
MESSAGE ":INPUT A$:FOR I=1 TO LEN
(A$)
80 D=ASC(A$(I)):INV=0:IF D>128 THEN
D=D-128:INV=1
90 IF D>32 THEN D=D+96:GOTO 110
100 IF D>96 THEN D=D+32
110 A=(D-32)/8:FOR C=0 TO
7:S(C)=0:NEXT C:FOR B=7 TO 0 STEP-1
120 FOR T=7 TO 0
STEP-1:PK=ABS(255*INV-PEEK(T+CS+A))
130 IF PK-B(B)-S(T)>0 THEN
S(T)=S(T)+B(B):H(T)=1:GOTO 150
140 H(T)=0
150 NEXT T:FOR D=1 TO L:FOR J=7 TO 0
STEP-1:IF H(J)=1 THEN PRINT #1:S$;
160 IF H(J)=0 THEN PRINT #1:Z$;
170 NEXT J:PRINT #1:NEXT D:NEXT
B:NEXT I:RUN
```

Oops
 By Dave Stengel

Heh. It seems I printed a few mistakes in Febuary's newsletter. I am sorry, and I will take this time to correct my mistakes. First a few things concerning Jupiter Mission.

1. There are 4 top secret disks.
2. The only safe place to land is inside the force field.

Hopefully I didn't stir up too much confusion. Also, most of you have probably noticed that I cannot spell worth didlysqat. Well, I am constantly trying to improve my vocabulary. Thanx.

Notes from the Sysop
by Dick Johnson

As many of you already know we will have a new BBS soon (it should be up by the time you read this). It will be FOREM 1.1 which became public domain last Febuary. I have tested it out at home using my Anchor Mark XII (1200 baud) and it works fine. The new board will make some things easier for all concerned. For example, it has multiple Message Boards which automatically condense themselves. Planned Board names are Chit Chat, News & Rumors, Technical Help, For Sale - Wanted, and Download Notes. Files which are uploaded are available for download immediately and are tagged as being NEW. You will have to request a System ID (password) again. Those of you who were already on the old board will be approved immediately if you use your old handle. You new users will be checked out by being called back for validation.

News articles may be uploaded to the BBS. Please name the it "NEWSxxxx" if for inclusion in both the TAIG and SPACE newsletters, use "TAIGxxxx" if only for TAIG and use "SPACxxxx" if only for SPACE.

I am happy to announce that we have raised \$110 so far with the sale of the Public Domain Software disks sold at the last TAIG & SPACE meetings. In case you haven't heard we have two double sided disk (an 850 and 1030 version) available. It contains such programs as AMODEM in versions 4.2, 5.3, and 6.0. Also, available are AMODPLUS.XL, KERMIT, TSCOPE, DISKLINK, RMODEM, plus support programs and documentation for many of the programs. KERMIT for the 1030 was recently added and is available on the BBS as will be all new programs added to these disks.

If you have not got your's yet the disk can be obtained at either ATARI User Group meeting for \$6 or by mail from Dick Johnson (612-521-0254), 3342 Humboldt Ave. N., Mpls. MN 55412 for \$8 (postage and disk handler cost \$2). \$5 of this goes to a special fund for new equipment for the board. This way we will not have to charge for using the board, and members who do not have modems

wont have to bear the expense of improvements.

Well, that about covers it for this month. Keep that BBS phone ringing.

ATARI PASCAL 1.0 FIXES
By MJN

As stated in the previous article all of the non-documentation fixes we at SPERRY have come up with have been in the include files. In this article I will describe the changes that need to be done to the include files that are in error, and in future articles I will advise you on the use of these include files. On the compiler disk you will find a list of small files called: moves, bitprocs, heapstuf, stdprocs, isoprocs, fltprocs, gsprocs, dskprocs, and strprocs; these are the include files as shipped with the ATARI Pascal. Not all of these include files contain errors, but the files that are in error are dskprocs, strprocs, bitprocs, and gsprocs. While the other include files work ok there are some structural problems in their content and usage, but more on that later. So let's go bugbusting, boot up your favorite text editor (and you must have one to create Pascal source code), and we will start with the file dskprocs. After loading it in you will see the structure for accessing the "built in" functions and procedures. The first fix we will do is to add a new function to be called IORESULT, which when called will return an integer value. To help you along, this is what the function will look like (remember to maintain a seperation with a "return" between the function, or procedure, decelerations).

```
predefined
FUNCTION IORESULT:INTEGER;
```

Now we will add another new function to be called XIO this function is passed a byte value and returns an integer (example follows).

```
predefined
FUNCTION XIO(IOCB:BYTE)INTEGER;
```

Now for the other fixes in this file I will show the final definition with the changes highlighted.

```
predefined
PROCEDURE BLOCKREAD(VAR F:ANYFILE;
                    VAR BUF:ANYTYPE;
                    VAR IOR:INTEGER;
                    SZ,
                    BLK:INTEGER);
```

```
predefined
PROCEDURE BLOCKWRITE(VAR F:ANYFILE;
                    VAR BUF:ANYTYPE;
                    VAR IOR:INTEGER;
                    SZ,
                    BLK:INTEGER);
```

```
predefined
PROCEDURE CLOSE(VAR F:ANYFILE;
                VAR IOR:INTEGER);
```

```
predefined
PROCEDURE CLOSEDEL(VAR F:ANYFILE;
                  VAR IOR:INTEGER);
```

This completes the changes that will fix the dskprocs file. Save this file and bring up the strprocs file; again follow the highlighted final definitions below and fix it.

```
predefined
PROCEDURE INSERT(VAR
SOURCE,DESTINATION:STRING;INDEX:INTEG
ER);
```

```
predefined
PROCEDURE DELETE(VAR
SOURCE:STRING;INDEX,SIZE:INTEGER);
```

This completes the changes to strprocs, so save it away and boot up bitprocs. Again follow the examples and let's fix this one.

```
predefined
PROCEDURE CLRBIT(VAR VAL:ANYTYPE;
                BIT:INTEGER);
```

```
predefined
PROCEDURE SETBIT(VAR VAL:ANYTYPE;
                BIT:INTEGER);
```

```
predefined
FUNCTION TSTBIT(VAR VAL:ANYTYPE;
                BIT:INTEGER):BOOLEAN
;
```

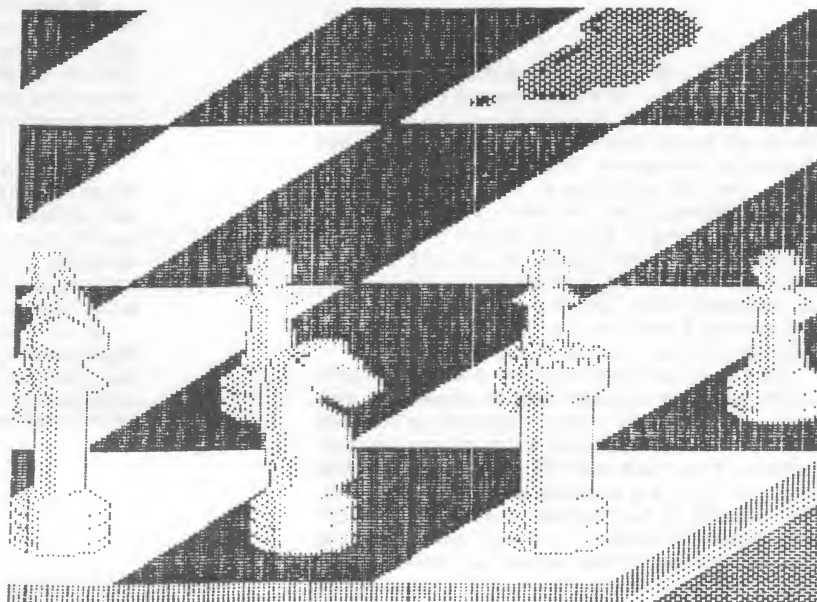

That is the fix to bitprocs, so save it away and let us move on to the problems to be found in gsprocs. The gsprocs include file does not contain errors in the function or procedure declarations as did the other files we fixed, but the problem comes in usage. In Pascal all TYPE'S and VAR'S are not only declared in the beginning of the program but in a certain order, which is before the procedure definitions. In the gsprocs include file there some TYPE and VAR declarations which if

included in the incorrect spot will cause a compile error, and there is no correct place for this file to be included as it now stands. The fix for this is to break this include file into three parts, one for each section of code, one file for the TYPE'S another for the VAR'S and a third for the function and procedure blocks. They can all be called gsprocs but is used a different extender for each part (ie. gsprocs.typ for the TYP'S gsprocs.var for the VAR'S and gsprocs.fun for the main body) you should be able to see and make the proper breaks yourself. Then include each part in the appropriate place when you go to use this include file. Now we have fixed all of the known include file problems, which as far as our testing has shown is all of the problems with the ATARI Pascal 1.0 in my next article I will give you some hints on the include file usage, explain the undocumented XIO function and tell you how to insert machine language subroutines in the Pascal code.

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Chess...

This was created by Dave Stengel using the Koala Pad and Kwik-Dump, a program downloaded of the TAIG/SPACE BBS.

FEBRUARY MEETING NOTES By MJN

Phil opened the February meeting on time with the announcement that ATARI is on schedule with both the 130XE and the ST series. In fact he indicated that you may be able to see and buy the 130XE computers starting APR 10 at k-mart stores. Most other retailers are waiting to see if ATARI releases the new ST series machines as planned in APRIL to decide whether to carry any ATARI computers at all. I think that when ATARI does ship the new computers stores will be falling over themselves to get them. This month was your last chance to renew your TAIG membership for \$10 because on MAR 1 the new dues are \$15 per year, so if you did not renew it is too late, but I thought you should know. At the next meeting we will hold a swap meet; this is your chance to sell, buy or trade your used software and/or hardware the doors will open at 5:00 PM for the swap meet. For those of you living in the northern areas you may want to check out the NA6S (northern ATARI group survivalists) which will meet at User Friendly at 6:30 on the third wednesday of the month (note: this group is a sub-group of TAIG and will share all the benefits). Dick Johnson then told of a special communications disk that will appeal to those of you who have 1030's because it contains programs specifically written for that model contact him for more information. Next meeting we will be taking nominations for a new slate of officers so think hard as to how you can help the club by participating, and become an officer. Next meeting will be at 7:00 on Mar 31, with a swap meet preceding the meeting starting at 5:00 PM see you there.

strike eagle by Mike Davis

Marketed by Microprose Software, this F-15 flight simulation is very exciting, and in my opinion, it is very playable. For example, if you like to fly but don't like going through landings and take-offs, then this simulation is for you.

Let's get into the aircraft. It is an F-15 and in the manual are the specifications for the aircraft which are important to know. There will be a state-of-the-art cockpit control panel in front of you. Also you will be wearing a HUD (Heads-Up-Display) helmet. It is this special helmet that gives you assorted visual displays that appear to be on the windshield of the cockpit. I would advise reading the manual first just to get an overview of this aircraft's capability. Besides you are going to have to look up the authentication codes anyway.

Here is a list of capabilities at your fingertips via joystick and/or keyboard controls. For armament, there are Guns (M-61A1 six-barrel 20mm rotary cannon firing 6000 rounds per minute with 1000 rounds of ammunition), Missiles (4 short range Sidewinders and 4 medium range Sparrows), and Bombs (6 sticks with each stick being three 500-pound bombs). For defensive systems, there is Radar (Long, Medium, Short range selectable), ECM Jamming (Electronic countermeasures), and Flares (should be released when an enemy heatseeking missile is near you). And of course you have full aircraft control with rudder and ailerons automatically coordinated. Your fuel supply is limited, but you can go back to base for repairs and replenishment of fuel and weapons. Your throttle control is from 55% to 100% power; naturally, your fuel consumption increases with more power. Also you have afterburners; this causes fuel consumption to be 60% higher than at 100% power, but this can get you out of tight situations at times.

There is a bit to learn, but don't let that discourage you. It's this versatility that's necessary to be able to accomplish the missions. There are seven missions in which up to four players can participate. Only one player flies at a time. You can pick one of four skill levels: Arcade, Rookie, Pilot, or Ace. Arcade doesn't allow any rolling or banking; so for the beginner not yet familiar with flying, he can get used to other systems of the aircraft first. In arcade, you're always level with the horizon, but you can still pitch up & down and also turn left & right. In fact, you can even do a loop in this mode.

Let's go on our first mission. Pressing START causes an authentication code to appear on the screen. We enter the proper response or else we won't be able to activate some of our weapon systems. After some disk I/O work, we are in the cockpit in flight and an enemy plane in front of us. Fire a couple of bursts, and we rack up our first enemy plane. So much for the easy part. Looking on our navigation screen we see our position and enemy installations such as, enemy airfields, enemy SAM missile sites, our home base, and our primary targets. To help us fly to a target, there is a navigation cursor which we put on the target. Now looking through our HUD helmet we see an N, A, and V cycling somewhere on the horizon. Just head the aircraft toward it, and we shall be on the proper vector.

So now we're just cruising toward a target minding our own business when all of sudden we get a warning from our instruments that a SAM (Surface-to-Air Missile) was fired, and we see it on our long range radar. If that isn't bad enough, we also see there's an enemy plane closing in from behind.

Well to say the least, you are kept pretty busy flying toward targets, evading enemy missiles (air and surface launched), and trying to stay alive avoiding being shot down by enemy aircraft as John Houseman would say "The old-fashion way." If we would happen to get shot down, we can always bail out in hopes of making it back for another try.

In all, I enjoy this program very much. The flight handling characteristics of this simulation is very good. And in respect to this aspect of the program, it is much better than Flight Simulator II which I shall be reviewing later.

The previous article was reprinted from the Atari information Digest. News letter of the Atari Boosters League East.



Twin Cities Atari Intrest Group
6824 Queen Ave. South
Richfield, MN 55423

Next TAIG meeting
March 31
Swap meet 5:00
TAIG 7:00

Saint Louis Park Rec. Center
5005 west 36 Street
Saint Louis Park, MN